

SAP Master Data Management Excellence Made Simple

August 08, 2024

 Z MDM

Designed by

Cambrian Lab

Agenda

- Panelists
- Brief Intro
- Unique Challenges with SAP Master Data
- Overcoming SAP Master Data Challenges with Digital Workflows
- Case Study
- Demo
- Q&A

About Cambrian Lab

Mission: To Provide Effective and Practical Solutions for Supply Chain Excellence

Team

Supply Chain, New Product Development and Technology Experts from SAP, Samsung, Siemens, GM, Ford, Applied Materials

Industries

Automotive, High-tech, Semiconductor Equipment, Medical Devices, Consumer Products

Locations

SF Bay Area, Detroit, Boston, Houston

Expertise

- New Product Introduction, Supplier Development, and Master Data Management
- Enterprise and Supply Chain Technology (ERP, SCM, Manufacturing, CRM, Sourcing, Finance)

Panelists

Kris Gorrepati

Product Management

Cambrian Lab

Manish Mathur

VP of Engineering

Cambrian Lab

Justin Williams

Master Data Solution
Enablement Manager

**Edgewell Personal
Care**

Sampling of our work in SAP Master Data Management Excellence

Memory and HPC Computing Systems Manufacturer

NPI Engineering, Master Data Management (Materials, BOM, AVL/AML)

Global Industrial Manufacturer

Master Data Management (Materials, NPI - Finished Goods, HAWA..)

Tier 1 Global Automotive Supplier

NPI Product Release, Materials, BOM

Global CPG Company

Master Data Management (Materials, Costing, Specification, Data Quality Workflows)

Specialty Chemicals Leader

Master Data Management (R&D Materials, Finished Goods, Customers, Suppliers)

Food and Beverage Leader

Finished Good/Ingredient Material Request, FG/Ingredient Material Creation, Extensions, Quality Inspections

Paper and Pulp Industry Leader

Finished Goods Material Request and Setup

Good SAP Master Data is Critical for Operational Excellence



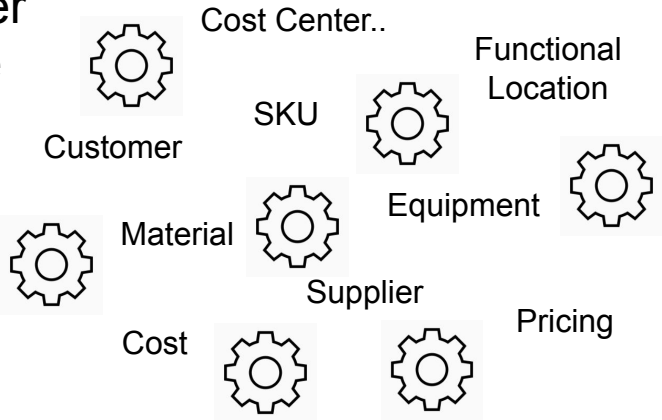
Customer Service



Supply Chain



Sales & Distribution



Manufacturing

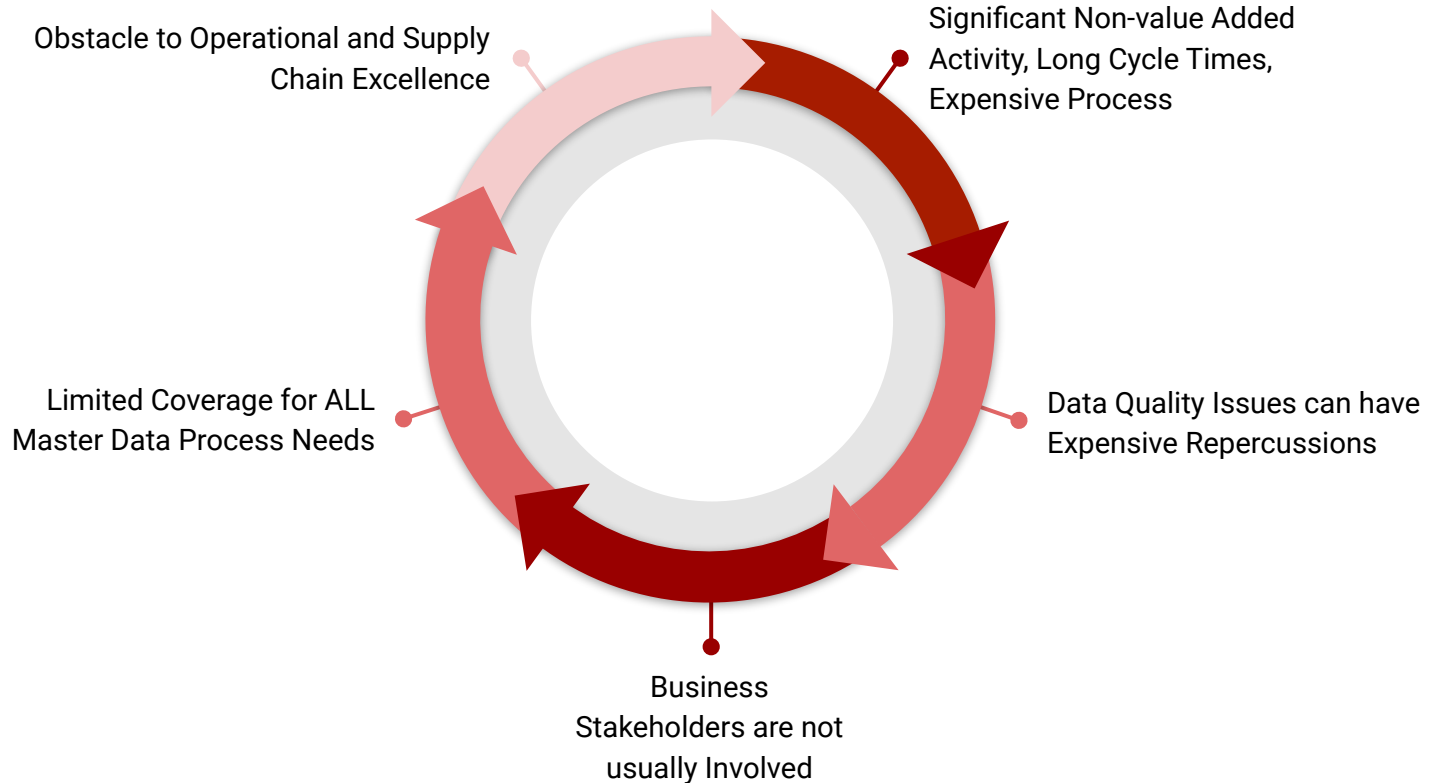


Finance

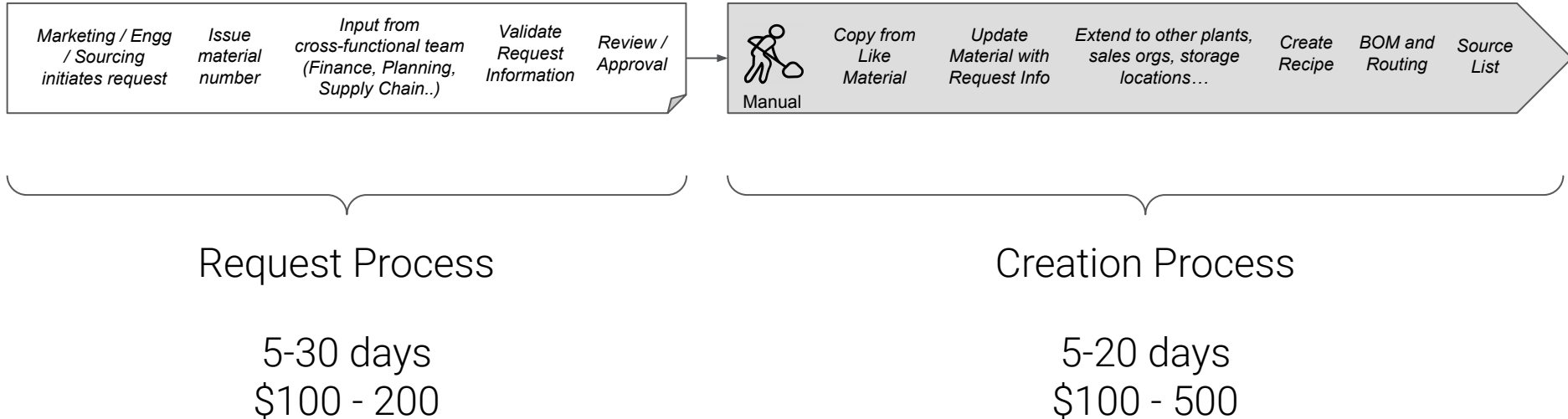


Maintenance

What we observed about SAP Master Data Management



Time-consuming and Expensive Process



SAP Master Data Process Costs Add Up

Master Data Process	Master Data Domain	Annual Number	Current Process Cost	Total Annual Cost
New Material Creation	Material Master	1,000	250	250,000
Extending Materials	Material Master	5,000	120	600,000
New Part Request	Material Master	1,500	50	75,000
New Pricing	Material Master	5,000	25	125,000
Pricing Change	Material Master	10,000	10	100,000
Bill of Material	Material Master	200	150	30,000
Bill of Material Change	Material Master	800	75	60,000
Routing	Material Master	200	150	30,000
Approved Supplier	Material Master	600	40	24,000
Purchase Info Record	Material Master	600	25	15,000
Approved Supplier Changes	Material Master	1,200	40	48,000
Purchase Info Record Changes	Material Master	1,400	25	35,000
Approved Manufacturer	Material Master	1,800	25	45,000
Component Change	Material Master	2,200	20	44,000
Component End-of-life	Material Master	800	75	60,000
Product End-of-life	Material Master	200	150	30,000
Quality Planning Info	Material Master	1,200	45	54,000
...				
New SKU	SKU	200	150	30,000
SKU Submission to Amazon	SKU	300	50	15,000
SKU Changes	SKU	600	40	24,000
..				
New Supplier Request	Supplier	800	60	48,000
New Supplier Creation	Supplier	600	120	72,000
Supplier Blocking/Unblocking	Supplier	600	25	15,000
Supplier Info Change	Supplier	1,200	40	48,000
...				
New Customer Onboarding	Customer	600	120	72,000
..				
New Equipment Install	Equipment	400	80	32,000
Equipment BOM	Equipment	200	50	10,000
Total Master Data Process Cost				1,991,000

Significant Room for Errors with costly repercussions

Display Material 50L731 (MRP 2, A&D Semifinished products)

Material: 50L731
Turbine blade 1st stage

MRP 1 | MRP 2 | MRP 3 | MRP 4 | Work scheduling

Plant: 1802 Denver (Main Plant)

Procurement

Procurement type X Batch entry

Special procurement Prod. stor. location

Quota arr. usage Default supply area

Backflush Storage loc. for EP

JIT delivery sched. Stock det. grp

Co-product

Bulk Material

Scheduling

In-house production days Planned Deliv. Time days

GR Processing Time days Planning calendar

SchedMargin key

Net requirements calculation

Safety Stock Service level (%)

Min safety stock Coverage profile

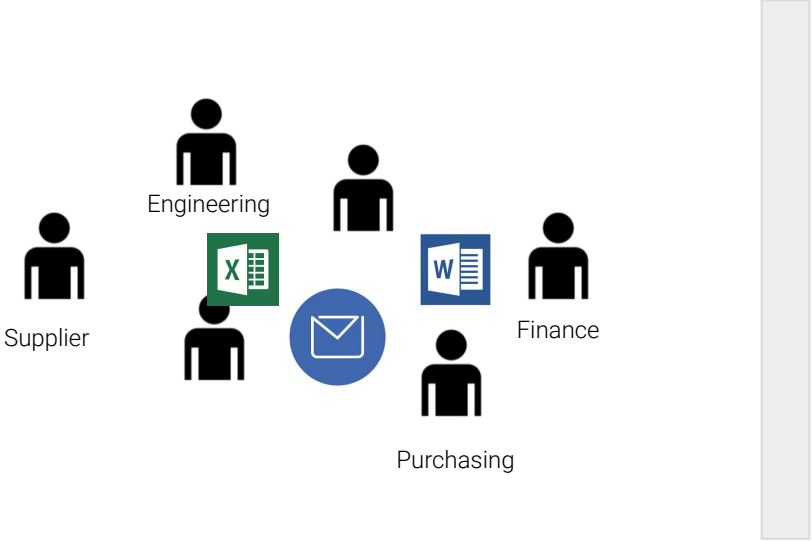
Safety time ind.

Safety time/act.cov. days

S/Time period profile

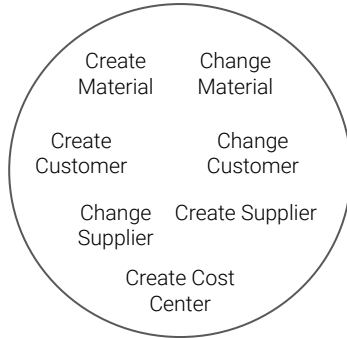
Key	Plant Data / Storage 1 - Shelf life data				Quality management		Material Maintenance Status	
Material Number*	Total shelf life	Storage percentage	Rounding rule for calculation of ...	Period for ...	Std. for the Shelf Life Expiration	Catalog Profile	QM proc. active	Material Maintenance Status
30000075				D	B			KELB

Business Users are out of the Loop

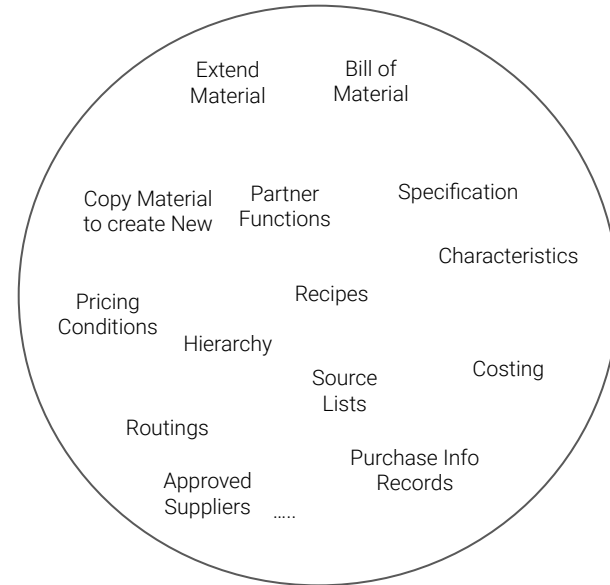


MDG
SAP S/4HANA
SAP APO
SAP ECC
ETL/LSMW

Many Unsupported SAP Master Data elements with Traditional Approaches



Supported by Traditional Approaches



Unsupported

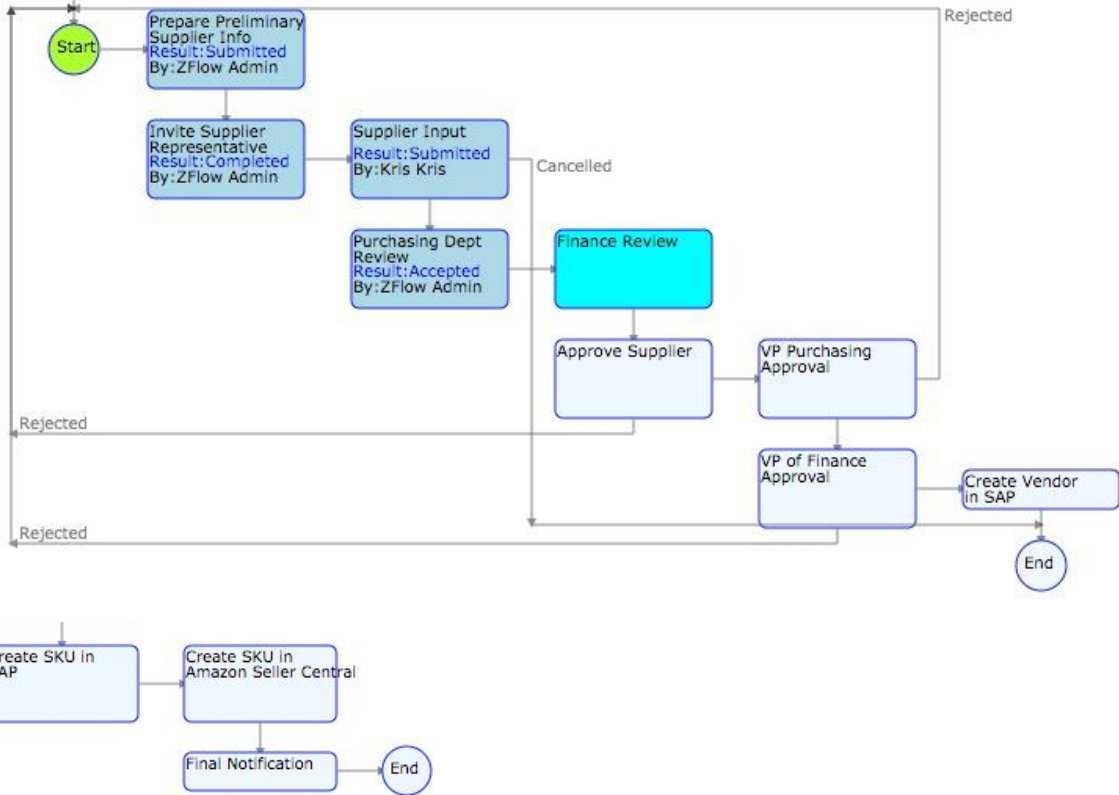
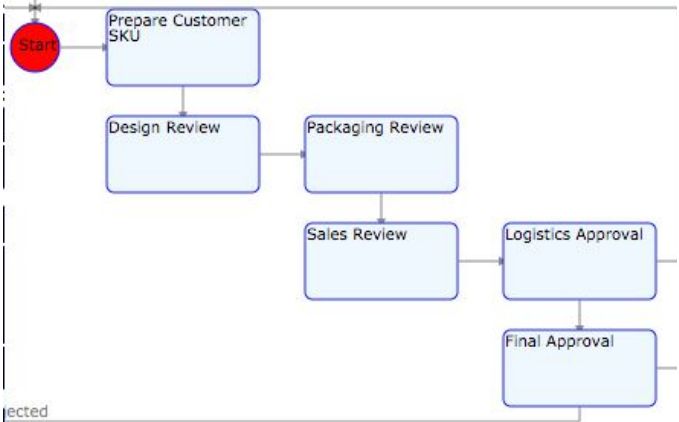
Agenda

- Panelists
- Brief Intro
- Unique Challenges related to SAP Master Data
- Overcoming SAP Master Data Challenges with Digital Workflows
- Demo
- Case Study
- Q&A

How to Approach Master Data Management



Master Data Management Should Reflect and Support the Business Process



Data Governance and Validation at the Input Source

Error proofing (Poka Yoke)

The screenshot shows a web application interface with a validation error message. The message box, titled "INFO : Following fields cannot be blank:", lists the following fields: Company Code, Tax Exempt, Street Address 1, Industry Code, and Primary Sales Rep. The error message is displayed over a form that includes a "Submit" button and a "Cancel" button. The form also contains a "Current Activity" section with a "Provide Ship To Same As Sold To" message, a "Tax Exempt*" dropdown menu, a "Real Ship To:" dropdown menu, a "Prospect Customer Number:" text input field containing "CLAB001", a "Customer Notes*" text area containing "This is a new customer", an "Urgent Request*" dropdown menu set to "No", an "Entity Region:" dropdown menu set to "NA", a "DIGITAL:" checkbox, and a "Customer Information" section with fields for "Name 1*", "Street Address 1*", "Street Address 2:", and "City:".

INFO : Following fields cannot be blank:
Company Code
, Tax Exempt
, Street Address 1
, Industry Code
, Primary Sales Rep

OK

Current Activity: Provide Ship To Same As Sold To (started)

Submit Cancel

Activity Comment

Instructions: Please enter data in the form below and save or add files to the process then click to continue process

Tax Exempt*: <- Select ->

Real Ship To: Yes

Prospect Customer Number: CLAB001

Customer Notes*: This is a new customer

Urgent Request*: No

Entity Region: NA

DIGITAL:

Customer Information

Name 1*: CLab

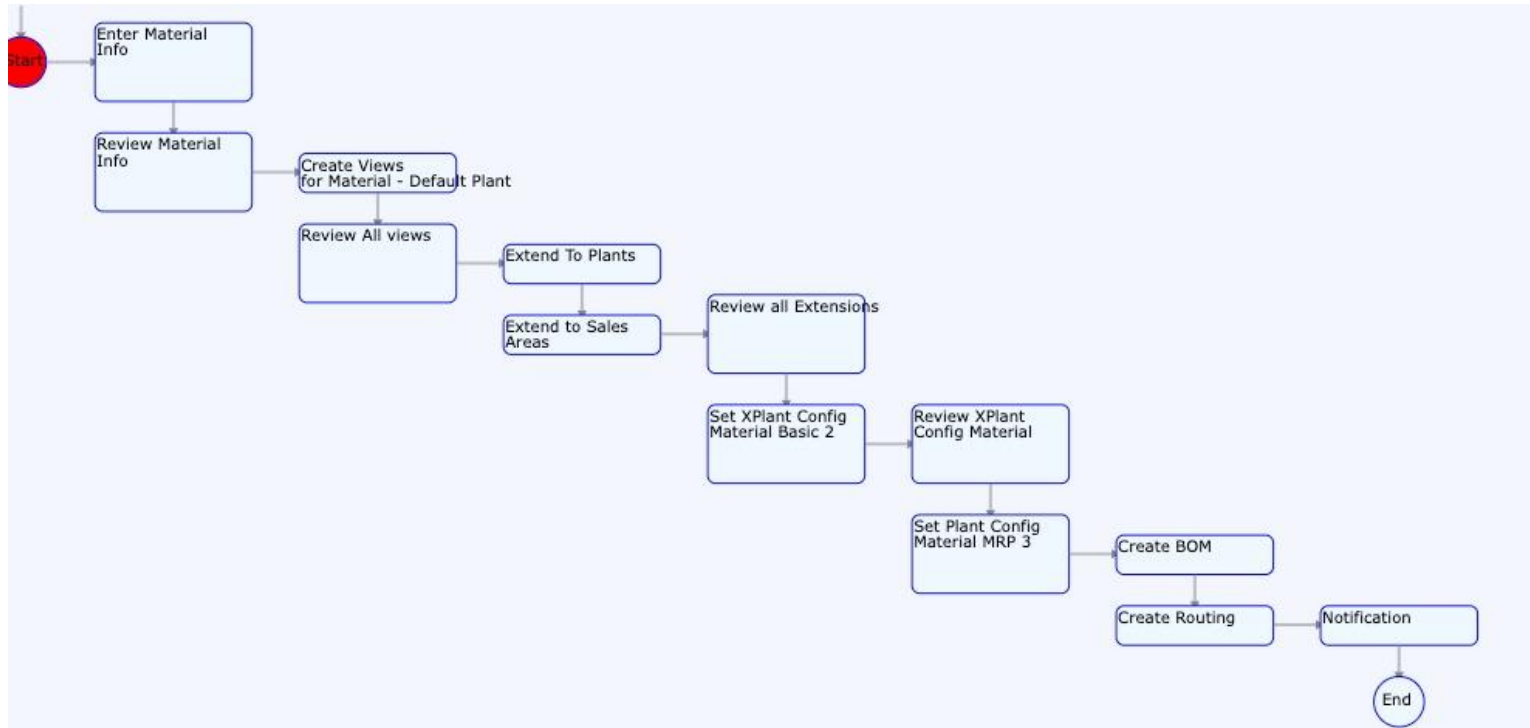
Street Address 1*: [Redacted]

Street Address 2:

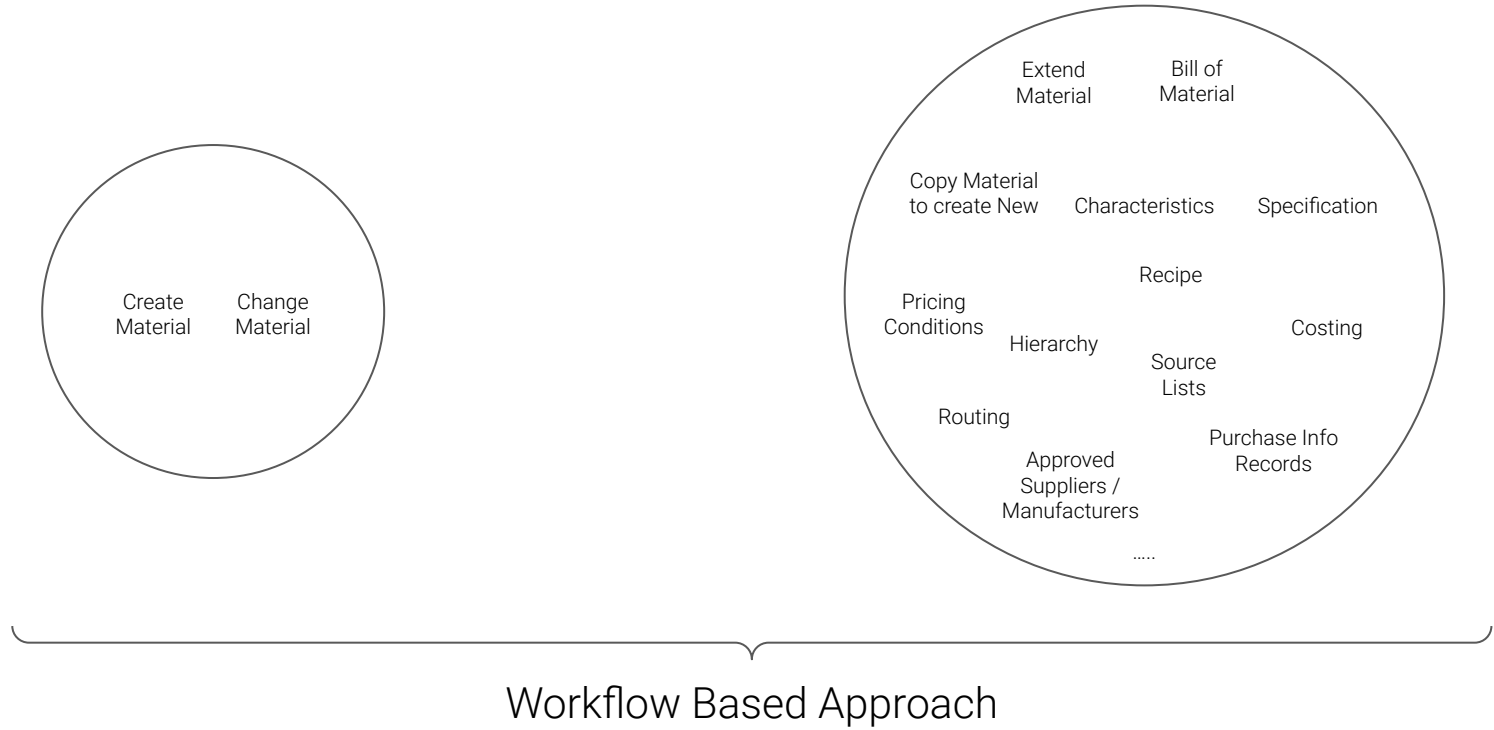
City*: Pleasanton

Delete Items Save Changes Reset Form Show Comments

Seamless Integration and Automation as part of Workflows to Reduce Cycle Time and Process Costs



Support for All Material Master Data Elements and Scenarios



Agenda

- Panelists
- Brief Intro
- Unique Challenges related to SAP Master Data
- Overcoming SAP Master Data Challenges with Digital Workflows
- Demo
- Case Study
- Q&A

Demo

Materials
Management
Scenario
(Request and
Creation)

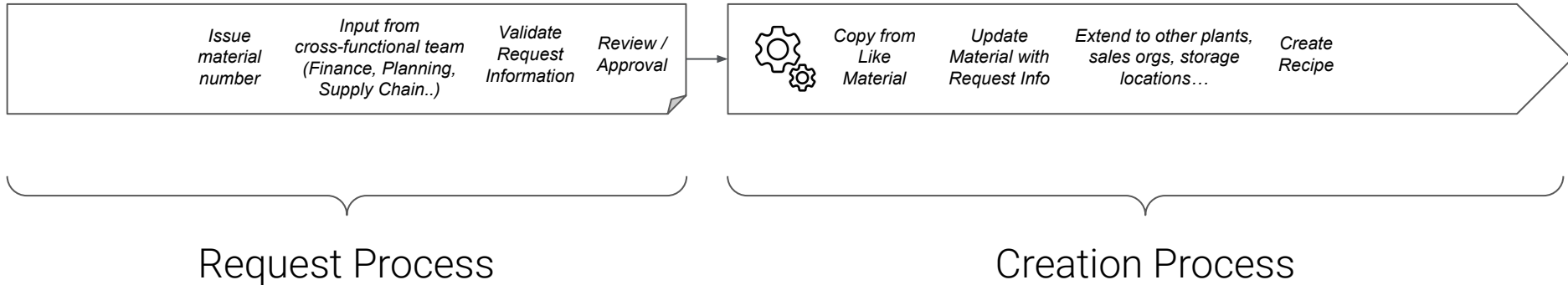
Governance as Part
of Workflows

Customer and
Supplier
Onboarding and
related Master
Data

NPI and
Engineering
related Master
Data

Materials Management Scenario

*Marketing / Engg
/ Sourcing
initiates request*



Agenda

- Panelists
- Brief Intro
- Unique Challenges related to SAP Master Data
- Overcoming SAP Master Data Challenges with Digital Workflows
- Demo
- Case Study
- Q&A



Master Data Process Improvement

Development Framework

Opportunity and Value

Schick



SkinIntimate



HAWAIIAN Tropic



Carefree

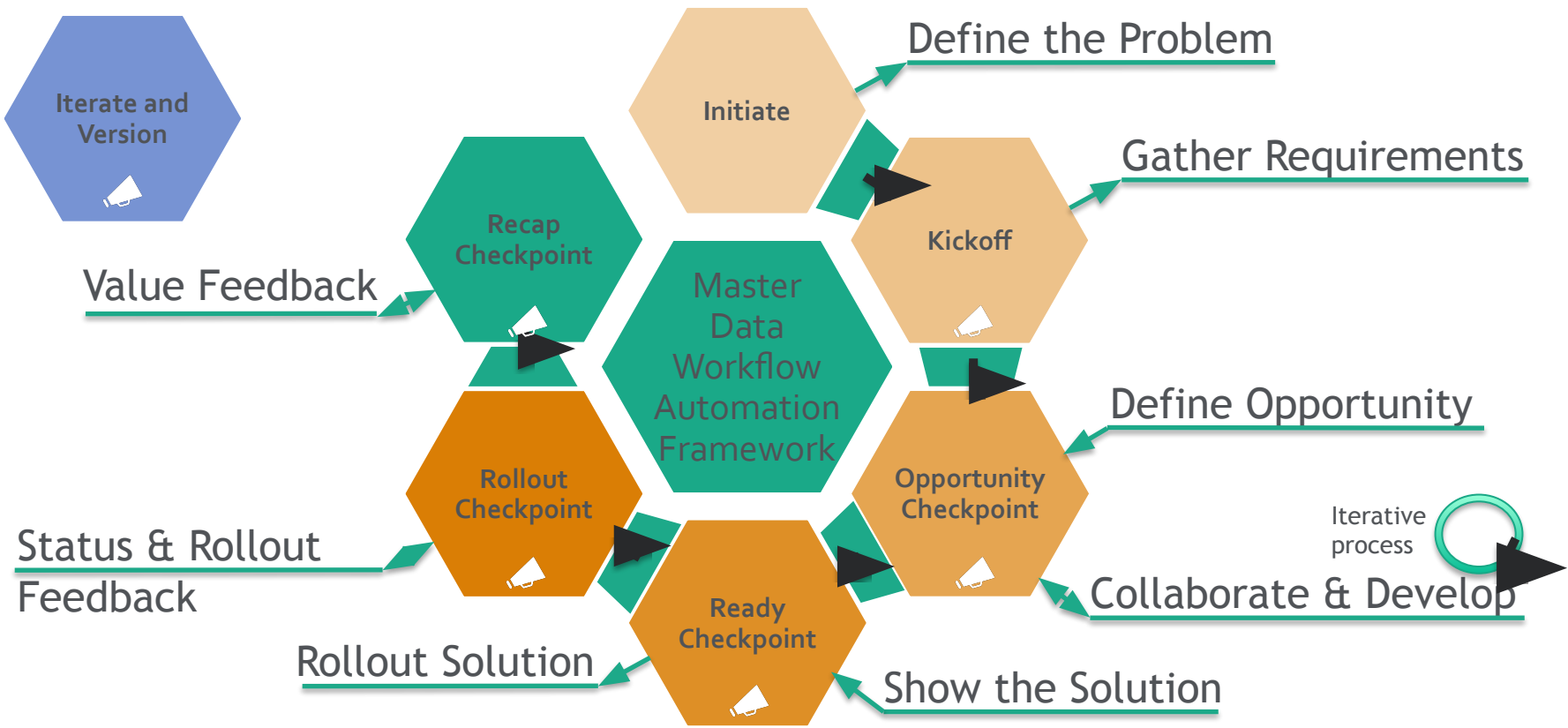
Stayfree



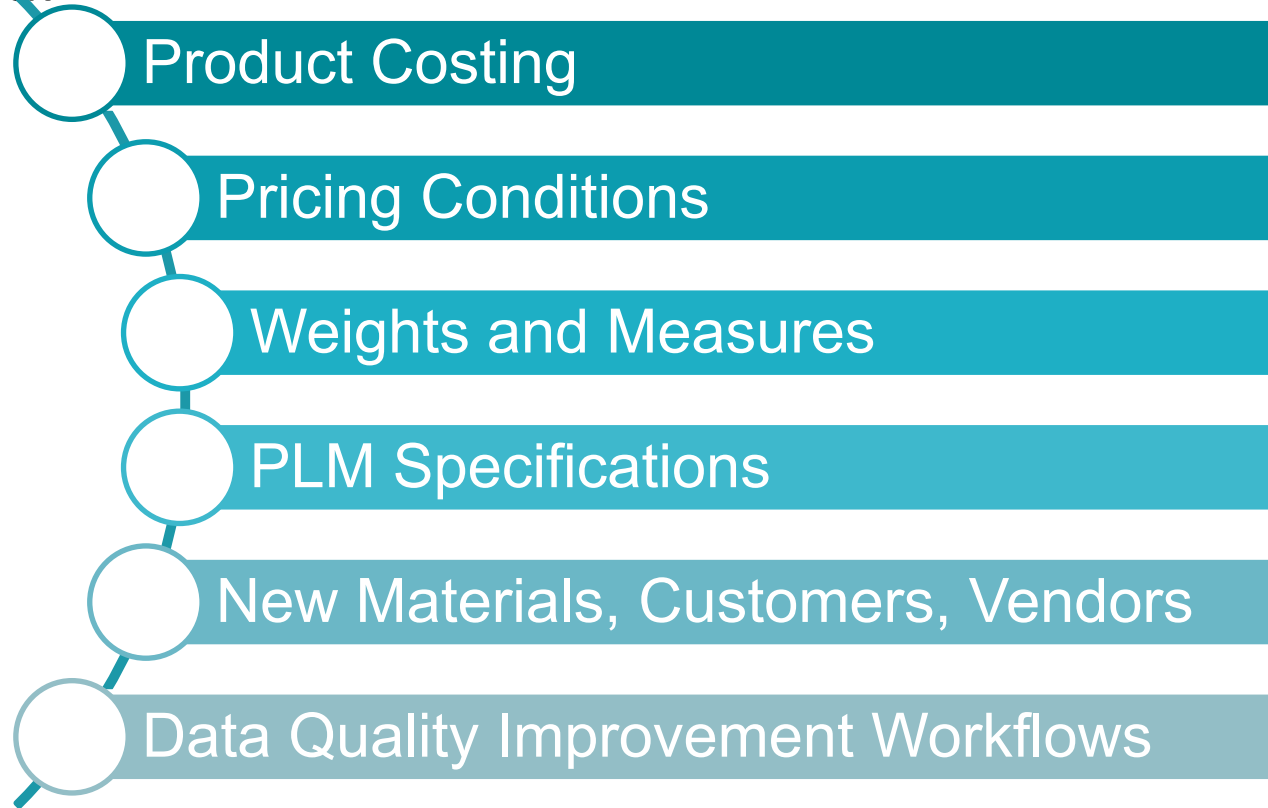
Wet Ones



billie

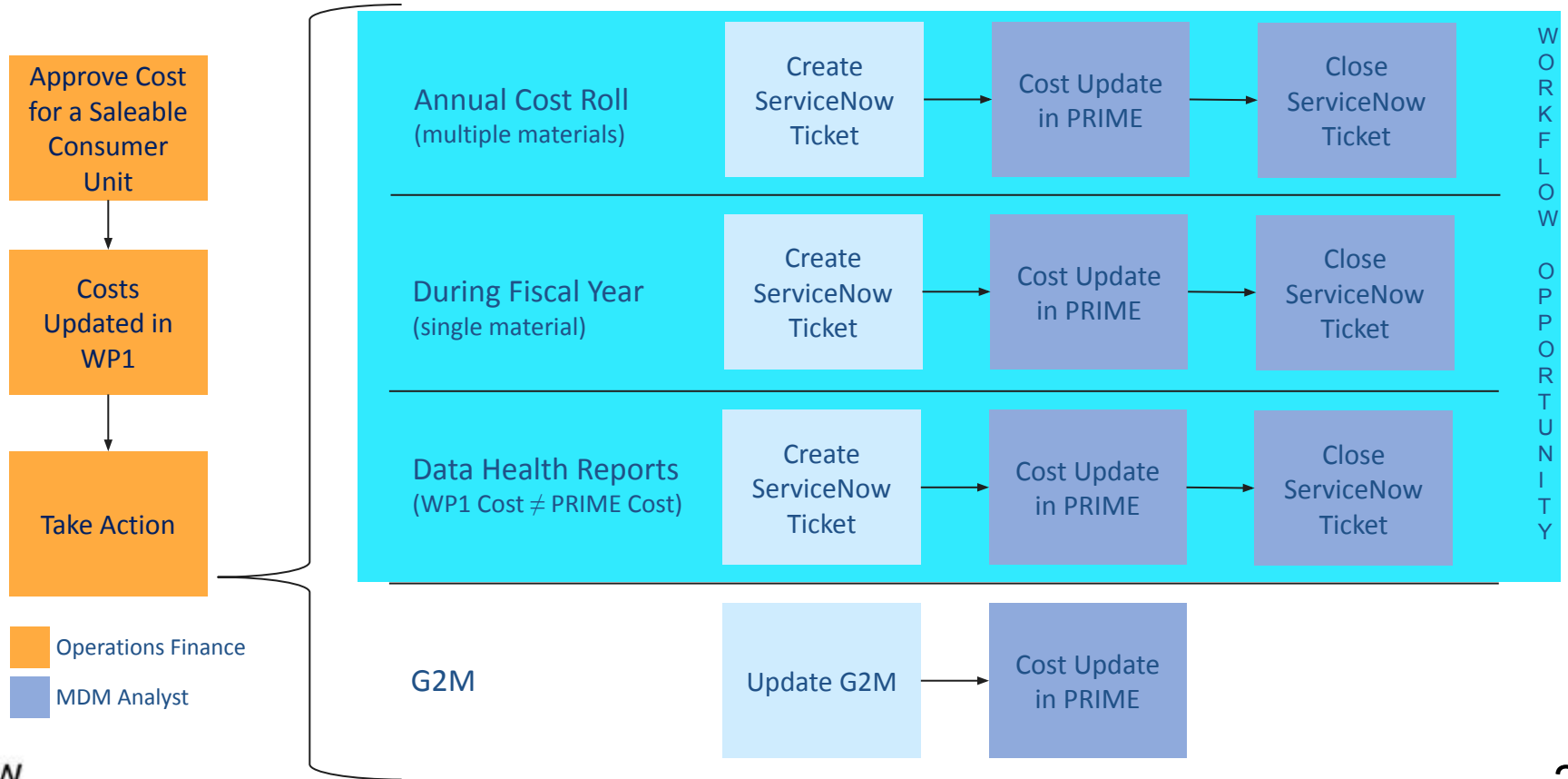


Many Areas for Improvement - Traditional and Non-Traditional

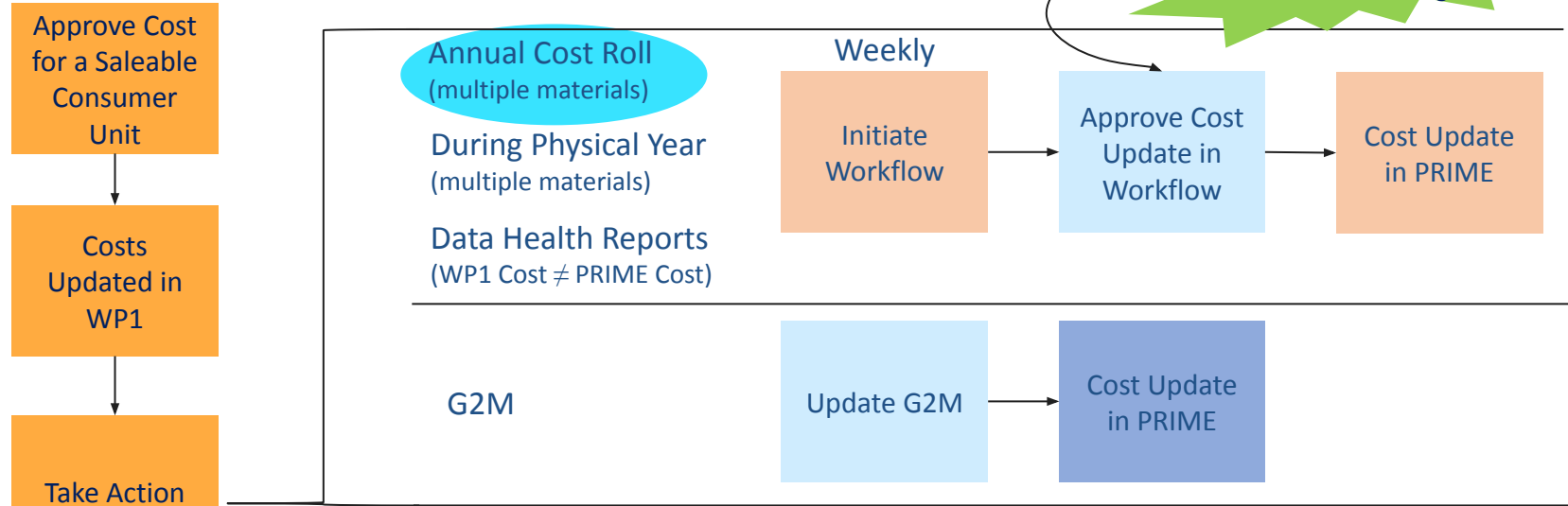


Master Data Process Improvement Opportunity - Example

Multiple streams, multiple points of failure



Value of Improvement



- **Opportunity**
 - Identify and Approve multiple Cost changes at one time
 - Automate updates to PRIME
 - Streamline 3 of 4 change mechanisms into 1 automated workflow, resulting in only 2 ways for update Costs in PRIME

- **Value**
 - Eliminate ServiceNow Creation
 - Eliminate Annual Cost Roll semi-automated process
 - Minimize MDM User Error
 - Improve turnaround time for changes to PRIME materials

Cost Update Version 1 Value



Time Savings

156 Total hours

- 78 in Operations Finance
- 78 in MDM Analyst group



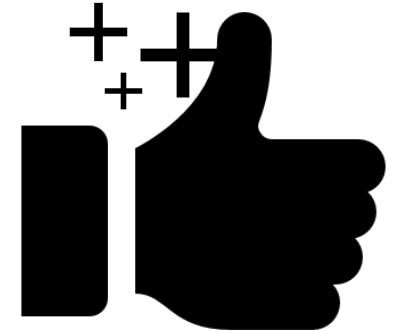
Increased Data Health

New Baseline: 98%
Current Baseline: 90.16%
Improvement: +7.84%



Increased Agility

New Days to update: 0
Normal days to update: 1
Number of areas involved in a change: 2 \square 1

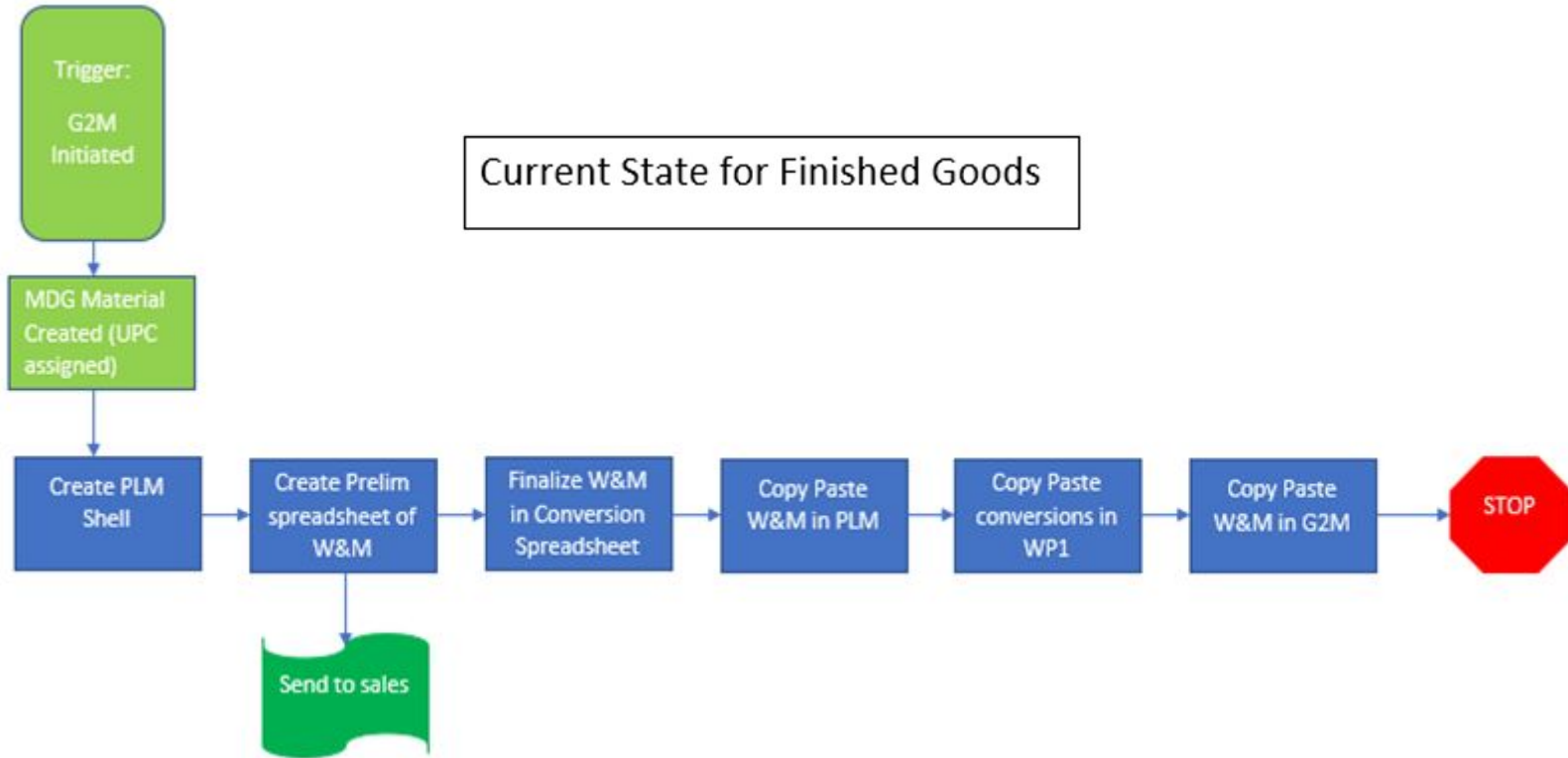


Value-Added Time

Current activity to accomplish change:
Generate ServiceNow ticket
Replaced by:
Approve Cost Updates

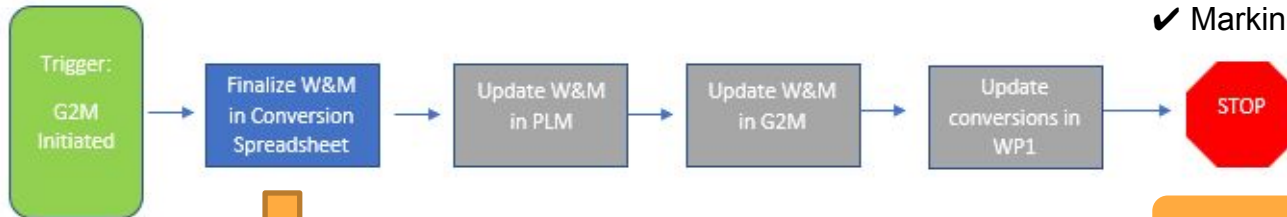
Master Data Process Improvement Opportunity - Example

Redundant data entry



Value of Improvement

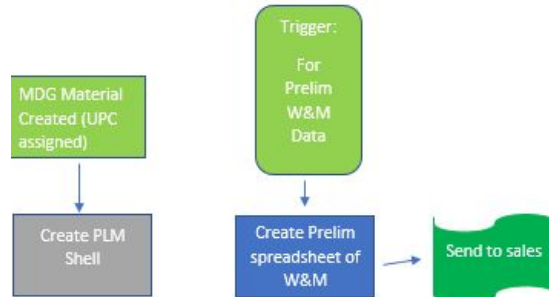
Proposed State for Finished Goods



User Steps

- Enter spec number and save
- Attach template spreadsheet
- Click submit
- Review data was loaded
- Click approve

THESE TASKS WILL REMAIN AS IS



Opportunity

- ✓ Trigger workflow off of G2M Task completion
- ✗ ~~Automated Create PLM Shell~~
- ✓ Manual effort only in Finalize W&M Worksheet
- ✓ Automated updates to PLM, WP1, G2M
- ✓ Marking Task Complete in G2M

Potential Value

- ✓ Reduce **system** manual entry from 3 Zero
- ✓ Update PLM, WP1, G2M automatically
- ✓ Reduce **impact** on 2 functional roles involved in process
- ✓ Reduce system switching from 2,3 Zero
- ✓ Confidence in our data
- ✓ Data in sync between systems
- ✓ Reporting Opportunities
- ✓ Displays included in the first phase

Weights and Measures - Digital Workflow Value



Time Savings

81 Total hours

- Packaging Engineers
- Base: 101 Hours
- New: 20 Hours ↑
- Savings: 80%



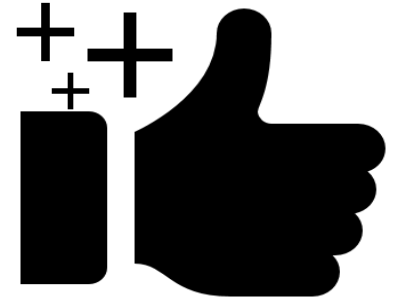
Improved Data Health

- Automated updates based on Standardized Static Template
- Eliminate data entry error
- Future Data Health Rule for Validity



Increased Agility

- Manual data entry in different systems reduced from 3 □ 0
- Number of areas involved in a change reduced from 2 □ 1



Value-Added Time

Current activity:

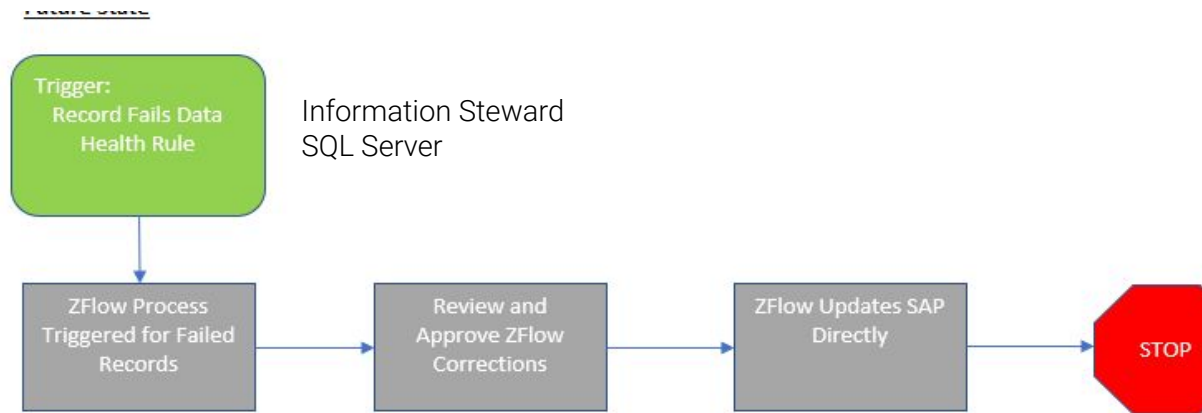
Manually enter data in PLM (SAP), WP1 (SAP), G2M (Custom App)

Update G2M task to complete

Replaced by:

- Workflow Activities for each material queued by ZFLOW
- Upload template to ZFLOW
- ZFlow updates PLM, WP1, and Custom App as part of workflow

Continuous Master Data Quality Improvement



Trigger workflow from Data Quality Health Check
Automated data correction or manual intervention when needed
Automated updates in SAP
Continuous improvement of master data quality (drive to zero errors)

Reduce **system** manual entry from 1 Zero
Update SAP automatically
Reduce **response time** to review/update
Reduce **impact** on order processing

Advantage of Digital Workflow Based Master Data Processes

Effective and Seamless
Master Data Workflows

Involves *Right People at the
Right Time*

Out-of-the-box Integration to
ERP, CRM, E-commerce, PLM,
Supply Chain, Manufacturing
Systems



Supply Chain Ready

Build your own workflows with
easy-to-use workflow designer

Support for Many Master
Data Domains and
Elements

Support for Different Languages, Types, Plants, Divisions...

Pad de lancement Administration Maintenance des données Dépôt Rapports Rechercher ZFlow Admin

New Material Test - NMCT00001

Processus Info **Activité actuel** Les données Membres Les rôles Flux de travail Journal Graphique Le communiqué

Activité actuel: Review SAP Material (Statut d'activité: Activity commencé) Vous êtes un interprète Interprètes: ZFlow Admin

Accepter

Activity Comment

Numéro du matériel: 123457

Material Description: Test Material from ZFlow

Type de matériel: ZF01

Material Group: CS

Base UOM: AKG

Netweight: 66.00

Le document

Nom	Description	Type de fichier	Taille du fichier	Date
No attachments found				

Statut d'approbation:

pas	Nom	Résultat	date d'achèvement	Commentaires
Start	ZFlow Admin	Terminé	2022/01/15 0:00:00	
New Material Info	ZFlow Admin	Présenta	2022/01/15 0:00:00	
Review	ZFlow Admin	Accepté	2022/01/15 0:00:00	

Enregistrer le formulaire Formulaire de réinitialisation Ajouter des fichiers Show Comments

Launch Pad for Administrator

New Material Request

- Pre NPI Multiple Material Request
List | Find | Insights | New
- Pre NPI Single Material Request
List | Find | Insights | New

Materials Master Data Management

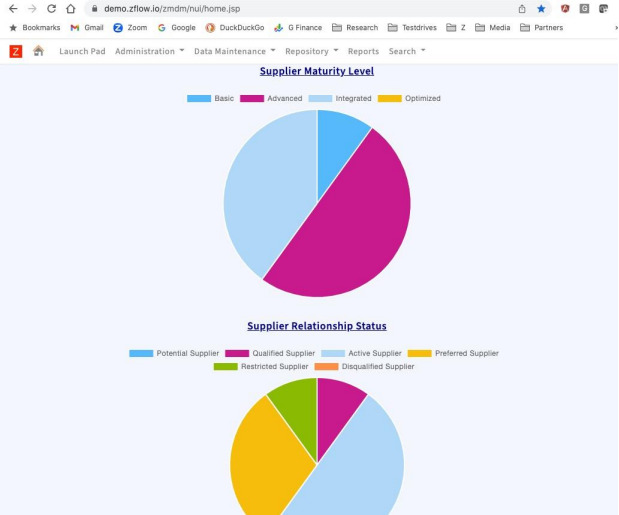
- NPI Process for ERSA Materials
List | Find | Insights | New
- NPI Process for Finished Goods
List | Find | Insights | New
- NPI Process for HAWA Materials
List | Find | Insights | New

Customer Master Data Management

- Create Customer - EMEA
List | Find | Insights
- Create Customer - N. America
List | Find | Insights
- SAP Customer Master
List | Find | Insights

Reporting and Analytics

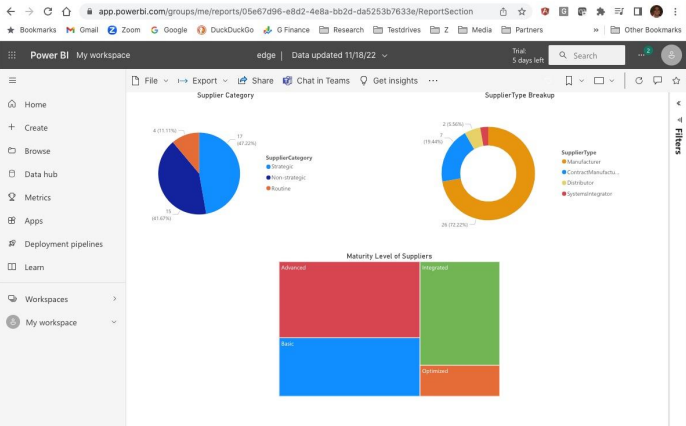
Embedded



Internal Reporting Framework

The screenshot shows a web application menu titled "Reports". The menu items are: General, User, MPN Reports, BOM Reports, Other Reports, Data Inconsistency Reports, Blank MPN-Search, Parts with Duplicate MPNs, Parts with Same MPN and Different Purchased Parts - No MPNs, Data Extracts, Cycle Time Reports, Deviations, and EOL DB Reports.

Connect with PowerBI/Tableau



Digital Workflow based Materials Master Data Processes

- ❑ *Eliminates non-value added work, shortens cycle time, and decreases process cost*
- ❑ Easy to adopt and loved by users
- ❑ Proven success in many industries

Free Trial

Free Pilot

Agenda

- Panelists
- Brief Intro
- Unique Challenges related to Materials Master Data
- Overcoming Materials Master Data Challenges with Digital Workflows
- Demo
- Case Study
- Q&A

Contacts

Kris Gorrepati

Cambrian Lab

+1-408-569-3744

Kris.gorrepati@cambrianlab.net